Attendees

Co-Conveners:
Stephen Bernath & Craig Partridge

Workgroup Members:
Steve Andringa (for Phil Rigdon), John Arum, Tim Boyd, Clare Breidenich, Nina Carter, Michelle Connor, Kyle Davis (via Phone), Miguel Perez-Gibson, Edie Sonne Hall, Llewellyn Matthews, Adrian Miller (for Debora Munguia), John Miller, Bill Robinson, Steve Stinson, Paula Swedeen, Bettina von Hagen. Absent: Danielle Dixon

Guests:
Ed Murphy, Sierra Pacific Industries (via phone)
Rich Birdsey, United States Forest Service (via phone)

Staff support:
Jerry Boese and Andy Chinn, Ross & Associates Environmental Consulting

Background Documents for this meeting are available online at
http://www.ecy.wa.gov/climatechange/2008FA_for.htm

Informational/Panel Discussions

Workgroup members received informational presentations from panels on two topics followed by questions and answers. The PowerPoint presentations from the panelists are available on the Forest Sector Workgroup's webpage (http://www.ecy.wa.gov/climatechange/2008FA_for.htm).

Information Session: Silvicultural Carbon
Panelist:
Ed Murphy of Sierra Pacific Industries gave an overview of Sierra Pacific's research on silvicultural carbon sequestration. Sierra Pacific studied two watersheds using unconstrained plots for GIS analysis, ground inventories, and growth models. The study looked at several management scenarios, from custodial to intensive to regulated. Ed commented that existing models for estimating carbon in forest inventories can produce highly divergent result; Sierra Pacific uses its own model that takes stand stem wood volume into account, which they believe produces a more accurate estimate. Sierra Pacific's study demonstrates that with intensive management, Sierra Pacific's forests can sequester up to 150% more carbon per acre when off-site storage and mill residue are included, resulting in a net gain in carbon sequestration offsets equal to 877,000 vehicles. The reason for this is that intensive management creates forests that are similar to fire-developed forests, with less loss from inter-tree competition and mortality. On the topic of rotation lengths, long rotations store more carbon, however they also elevate the risk of releasing the stored carbon through wildfires or windstorms.

Materials from Dr. Mark Harmon and Dr. Olga Krankina of OSU were distributed to the workgroup members in lieu of a presentation.

Information Session: Carbon in Harvested Wood Products

Panelists:

Rich Birdsey of the US Forest Service gave an overview of the research conducted by USFS on carbon in harvested wood products. USFS used two estimation approaches: A 100 year estimate and an annual estimate. The 100 year estimates produce much lower stored carbon estimates, and Rich pointed out there is likely an optimal combination of the two estimation approaches. Estimation factors are specific to different regions due to the variation in forest types, wood uses, and manufacturing facilities. The carbon pools that require the most study are soils and wood products.

Edie Sonne Hall of Weyerhaeuser provided an overview of the terrestrial carbon sink and carbon accounting, including flow and stock change accounting. Globally, the terrestrial sink is equivalent to 1/7 of fossil fuel emissions. The IPCC has three approaches to products, with the latest greenhouse gas inventory guidelines issued in 2006. Of these, the United States uses the production approach.

Design of Avoided Conversion Project Type

Report from Avoided Conversion Subgroup

Workgroup members continued their substantive discussion of land use conversion. Adrian Miller summarized the work of the avoided conversion subgroup, which met on June 13. The subgroup discussed a document prepared by Adrian that considers dealing with avoided conversion as either an offset within a cap and trade system or as another form of credit outside of a cap and trade system. The subgroup discussed how the point of conversion leads into the transfer of development rights (TDR) concept and the possibility of combining the value of a development right, the value of carbon, and the value of ecosystem services in order to affect a land use decision. Adrian pointed out that without forestry infrastructure, conversion is the only revenue stream available to landowners. With this in mind, some of the cap and trade auction revenue could be allocated toward specific forest landowners as an incentive to keep their land in forests. Adrian's document contains a placeholder for system funding, such as tax incentives or tax credits, and discusses indirect credits (such as green building standards) that could indirectly benefit landowners by creating demand for products.

Workgroup members added the following comments:

- Avoided conversion as described in the paper presented by Adrian is a voluntary approach, not regulatory
- Incentives can be considered both carrots and sticks. In other words, the government cannot use direct regulations to ban development, but it can put in place negative financial incentives to prevent development in ways that are not climate friendly.

At the conclusion of the June 13 meeting, the subgroup agreed to form drafting groups on each of the major topic areas discussed: TDR, data needs, green building standards,

and ecosystem service districts. The workgroup discussed the topics of the drafting groups.

Drafting Group 1: Transfer of Development Rights (TDR)

Given the discussion of TDR and its potential for resolving several aspects of the avoided conversion issue, Michelle Connor provided a brief overview of the TDR concept. Workgroup members then engaged in a discussion of TDR and the document "Smart Growth as a Carbon Offset", with the following comments:

- A workgroup member suggested a small-scale pilot project in order to develop parameters and determine which credits are in high demand and which are not.
- One way to deal with the leakage issue is to place a cap on the number of acres developed, and then have trades within the cap.
- One alternative is to have offset values accrue to the county so that it could administer the program and distribute benefits back to landowners.
- Until the rate of forest land conversion is zero, any forest landowner that makes the decision not to convert should be recognized.
- Greenfield development is not cheap due to infrastructure requirements such as stormwater drainage, roads, sewer, and power. The economics of development are reaching the point at which developers will return to developed areas to increase density rather than build more homes in rural areas.
- A workgroup member suggested pursuing TDR, but also creating a program that charges for the carbon emissions from development. In those cases where development continues (i.e. non smart growth developments), there would be a charge for emissions and the revenue would go into an account for landowners who choose to implement longer rotations.
- As the workgroup captures suggestions and recommendations it will be important to keep track of assumptions, caveats, and unanswered questions.

Drafting Group 2: Data

Steve Stinson and Stephen Bernath emphasized the need for a quality forest database. UW has been developing a statewide parcel database, including a forest layer, that is due to be released next month. UW has had some difficulties with certain counties not allowing access to their information. Steve and Stephen will work on a budget proposal to maintain the database and bring it back to the full workgroup for consideration. This will include any statutory language as well as ultimate agency responsibility.

Drafting Group 3: Green Building Standards

Edie Sonne Hall and Bill Robinson summarized the task of this drafting group: Analyze whether or not a policy measure could be implemented to assure that life cycle analysis is included in building assessments. This topic crosses into an area covered by an implementation working group on energy efficiency and green building (http://www.ecy.wa.gov/climatechange/2008CAT_iwg_bee.htm); the forestry co-conveners, with Edie and Bill, will coordinate with this IWG.

Drafting Group 4: Ecosystem Service Districts

Paula Swedeen summarized the concept of ecosystem service districts, which arose from the desire to create incentives completely outside of offsets for forest landowners to create revenue streams. The concept is that intact ecosystems provide a variety of services, and depending on the service, people close by or downstream receive the benefits. Private landowners are therefore providing a service for people downstream, which leads to the idea of paying landowners for those services. There is empirical research to suggest that people are willing to pay for services such as this, and there are several well-developed programs in Latin America that have worked well.

Concluding Comments

- The co-conveners reminded members that the workgroup's challenge is to embrace commercial forestry and try to find something that can be used in a system that keeps more carbon out of the atmosphere for a longer period of time. The group has not been asked to design a protocol, it has been asked to frame the critical aspects of a protocol design. The next step for the group is integrating the forest products discussion with a forest project type that appeals to the broadest number of people possible.
- A workgroup member suggested a voluntary cap opt-in for landowners with benefits such as additional credits for business-as-usual.
- Workgroup members suggested that it would be useful to hear from either Dr. Olga Krankina or Dr. Mark Harmon from OSU.[1]

Next Steps

- The co-conveners will work with the drafting group on green building standards to coordinate with the Energy Efficiency and Green Building IWG.
- John Miller will research the Clallam County TDR program and why it is not currently being utilized. He will report his findings at the next meeting.
- The data drafting group will work on a draft resource proposal, including statutory language and agency responsibility, for maintaining a forestry parcel database.
- Edie Sonne Hall will send workgroup members a recent study from the State of Georgia on ecosystem services.
- The avoided conversion subgroup will reconvene prior to the next full workgroup meeting on July 9 to further develop a straw proposal for the workgroup's consideration.
- The co-conveners will consider holding a webinar for workgroup members during which they can hear presentations from Dr. Krankina and/or Dr. Harmon.
- Workgroup members may send any unanswered technical questions to Jerry Boese. Jerry and the co-conveners will be keeping an inventory of technical questions to work on.

[1] A silvicultural carbon presentation by Dr. Krankina and Dr. Harmon was sent to workgroup members prior to the meeting and is available on the workgroup's web page.

Public Comment

Members of the public were given an opportunity to comment either in person or via phone. There were no comments from the public.

The meeting adjourned at 4:15 pm.